

## REMARKS

Claims 1-17 are pending in this application, with claims 1 and 5 being independent. For at least the following reasons, reconsideration and allowance of the instant application is respectfully requested.

### Claims Objections

Claims 1, 5, and 17 were objected to for alleged informalities. Claims 1, 5, and 17 have been amended. Therefore, reconsideration and withdrawal of this objection is respectfully requested.

### Claim Rejections -35 U.S.C. § 112

Claims 3, 6, 12, 16, and 17 were rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite. Claims 3, 12, 16, and 17 have been amended. Therefore, reconsideration and withdrawal of the rejection of claims 3, 12, 16, and 17 is respectfully requested.

The Office Action asserts that claim 6 recites the SCF entity. Applicants disagree because claim 6 recites a SCF entity. Accordingly, reconsideration and withdrawal of the rejection of claim 6 is respectfully requested.

### Claim Rejections -35 U.S.C. § 103

Claims 1, 2, 4-7, 12, and 13 were rejected under 35 U.S.C. § 103(a) over U.S. Patent Application Publication Number 2003/0112766 ("Riedel") in view of U.S. Patent Application

Publication Number 2004/0151114 ("Ruutu"). This rejection is traversed for at least the following reasons.

Riedel discloses an adaptive QoS management unit 304 of a mobile terminal (mobile node). The QoS management unit 304 illustrated in FIG. 3 of Riedel is installed mainly on a mobile terminal, and can only make resource and admission control at the local node (the mobile terminal itself) based on availability of resources on and the QoS reservation state of the local node.

Specifically, the proposed QoS management unit 304 has to be implemented on all nodes along a communication path between a mobile node (MN) 208 and a correspondent node (CN) 210 to get the full support from the underlying QoS model. *See e.g.*, Riedel at paragraph [0093] and FIG. 4. It is well known that both the MN and the CN are user terminal devices. Since the proposed solution of Riedel is basically dedicated to an adaptive QoS management unit (304) running on mobile nodes (MNs) (see paragraph [0034] of Riedel), the intermediate nodes do not need the full functionally scope of the QoS management unit. *See e.g.*, Riedel at paragraph [0094] and FIGS. 3 and 4.

As recorded in paragraph [0037] of Riedel, the QoS management unit 304 can carry control information in the IP packet header, and such an in-band signaling approach can be used to manage reservation flow state in mobile networks. FIG. 13 of Riedel also discloses that the AvBW filed 1304 represents available bandwidth at the node. In such a manner, Riedel provides a distributed QoS management solution by installing a QoS management unit on all nodes on the communication path. Each QoS management unit 304 installed on a node can only know the availability of resources and reservation flow state on the local node. Therefore QoS

management unit 304 can only perform the resource and admission control based on the information such as availability of resources on and reservation flow state of the local node.

To the contrary, claim 1 of the instant application provides a system of dynamic QoS negotiation in Next Generation Network (NGN), which includes

*“a Resource and Admission Control Subsystem (RACS), adapted to obtain and process a resource reservation request required for a media flow of a service transferred in NGN, perform authentication and determine admission control decision parameters based on operation policy rules and user profile configured by an operator, and availability of transport network resources, and send the admission control decision parameters to a concerned Transport Functional (TF) entity for execution, wherein said reservation request contains QoS requirement parameters;*

*the Transport Functional entity, adapted to ensure QoS of the media flow of the service transferred in NGN according to the admission control decision parameters.”*

Applicants respectfully submit it is well known that the RACS is a network device but ***not*** a user terminal device. This can also be seen from, for example, paragraph [0004] and FIG. 1 of the instant application. As such, Applicants respectfully submit it is not appropriate to compare the RACS of claim 1, which is a network device, with the QoS management unit of Riedel, which is a user terminal device.

Further, as a network device, the RACS can get the availability of the resources on the whole network instead of the availability of the resources on a certain node. Therefore, the RACS can perform authentication and determines admission control decision parameters based on operation policy rules and user profile configured by an operator, and availability of transport network resources. In the solution of the instant application, since transport network status information such as network resource availability and network performance can be known in the RACS, the most reasonable admission control decision parameters can be determined for the corresponding service in accordance with the actual conditions of the network.

Therefore, the solution of the instant application and the technical effect thereof are very different from those of Riedel. Even if the RACS of claim 1 is constrainedly compared with the QoS management unit of Riedel, Riedel still does not describe or suggest at least *“an RACS adapted to ... perform authentication and determine admission control decision parameters based on operation policy rules and user profile configured by an operator, and availability of transport network resources, and send ... to a concerned Transport Functional (TF) entity for execution”* and *“the Transport Functional entity”* as recited in claim 1.

Ruutu discloses a system and method for buffering messages between at least two applications over a network implementing a QoS framework. The Message Queue 500 illustrated in Ruutu is adapted to temporarily store messages transmitted from one application to another, and is located in a computer, server or other system that is sending the messages, and/or in the system that is receiving the messages. *See e.g.*, Ruutu at paragraphs [0043] and [0033]. Applicants respectfully submit that Ruutu does not describe or suggest that the Message Queue 500 can ensure the QoS of a media flow of the service according to admission control decision parameters, either.

In contract, referring for example to paragraph [0004] and FIG. 1, in the instant application the Transport Functional entity is also a network device and receives the admission control decision parameters from the RACS and ensures QoS of the media flow of the service transferred in NGN according to the admission control decision parameters.

Therefore, Ruutu does not describe or suggest the Transport Functional entity of claim 1. Additionally, Ruutu does not describe or suggest the technical feature *“an RACS, adapted to... perform authentication and determine admission control decision parameters based on operation policy rules and user profile configured by an operator, and availability of transport*

*network resources, and send ... to a concerned Transport Functional (TF) entity for execution,”*  
as recited in claim 1, either.

Further, the above distinguishing features of claim 1 are not common knowledge. Therefore, even if the RACS of claim 1 is constrainedly compared with the QoS management unit of Riedel, those skilled in the art have no motivation to modify the solution of Riedel by introducing the above distinguishing features so as to arrive at claim 1. Therefore, claim 1 is non-obvious over Riedel in view of Ruutu.

For at least the foregoing reasons, reconsideration and withdrawal of the rejection of claim 1 is respectfully requested. For similar reasons, reconsideration and withdrawal of the rejection of the corresponding method claim 5 is also respectfully requested.

Claim 3 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Riedel in view of Ruutu and in further view of U.S. Patent Application publication Number 2004/013042 (“Lillie”). Claim 8 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Riedel in view of Ruutu and in further view of U.S. Patent Application Publication Number 2003/0129988 (“Lee”). Claim 9 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Riedel in view of Ruutu and Lee and in further view of U.S. Patent Application Publication Number 2004/0022191 (“Bernet”). Claim 10 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Riedel in view of Ruutu and Lee and in further view of U.S. Patent Application Publication Number 2001/0026554 (“Holler”).

Claims 3 and 8-10 variously depend from claims 1 or 5. Therefore, for at least the reasons presented above with respect to claims 1 and 5, the rejection of claims 3 and 8-10 is respectfully requested.

Claim 11 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Riedel in view of Ruutu, Lee and Holler and in further view of Bernet. Claims 14 and 17 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Riedel in view of Ruutu and in further view of U.S. Patent Application Publication Number 2004/0228363 (“Adamczyk”). Claim 15 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Riedel in view of Ruutu and in further view of U.S. Application Publication Number 2002/0136162 (“Yoshimura”). Claim 16 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Riedel in view of Ruutu and Holler.

Claims 11 and 14-17 depend from claim 5. Therefore, for at least the reasons presented above with respect to claim 5, the rejection of claims 11 and 14-17 is respectfully requested.

#### **Dependent Claims**

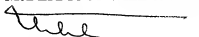
Under Federal Circuit guidelines, a dependent claim is nonobvious if the independent claim upon which it depends is allowable because all the limitations of the independent claim are contained in the dependent claims, *Hartness International Inc. v. Simplicatic Engineering Co.*, 819 F.2d at 1100, 1108 (Fed. Cir. 1987). Because claims 1 and 5 are allowable for the reasons set forth above, it is respectfully submitted that all claims dependent thereon are also allowable. In addition, it is respectfully submitted that the dependent claims are allowable based on their own merits by adding novel and non-obvious features to the combination.

Based on the foregoing, it is respectfully submitted that all pending claims are patentable over the cited prior art. Accordingly, it is respectfully requested that the rejection under 35 U.S.C. § 103 be withdrawn.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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